Engaging Stakeholders in Collaborative Energy Efficiency Planning and Implementation:

The Arkansas Story

Presented at the 2015 ACEEE National Conference on Energy Efficiency as a Resource

Wally Nixon, Commissioners' Legal Advisor
Arkansas Public Service Commission
501-682-5797 Wnixon@psc.state.ar.us

September 21, 2015

Background of Arkansas's Energy Efficiency Initiative and *Rules for Conservation and Energy Efficiency* Programs (2006 to date)

- The Arkansas Public Service Commission has three members appointed by the Governor. It has a General Staff that participates as a party before and operates separately from the Commissioners and advisory staff.
- The Commission regulates 4 electric and 3 natural gas investor-owned utilities and 17 electric co-operatives.
- To implement a law passed by the Arkansas General Assembly in 1977, the Commission launched a rulemaking on energy efficiency and conservation in January 2006.
- At the request of the electric cooperatives, the Commission granted them an exemption from the C&EE Rules, owing to their "unique" business model and operational characteristics. The PSC does require them to file an annual report on their EE programs.

Energy Conservation Endorsement Act (ECEA)

- The 1977 ECEA authorized the PSC to "propose, develop, solicit, approve, require, implement, and monitor" utility programs that conserve energy and to "*cause the utility companies to incur costs of service and investments*" that conserve energy.
- Although the law declares that energy conservation is "*a proper and essential function of public utilities*," it did not tell the PSC how to do it, or when.
- Recognizing that energy conservation might cause utility companies to experience decreased energy sales, the Act did require that the EE programs "*be beneficial to the ratepayers . . . and to the utilities themselves.*"

The 2006 EE Rulemaking

- The Commission asked its General Staff, the utilities, and other stakeholders to suggest implementation rules.
- The Commission also engaged a facilitator from the Regulatory Assistance Project—an EE expert and former state utility commissioner — to help the parties reach agreement collaboratively.
- After a year of meetings, workshops, comments, and briefs, the PSC finalized the C&EE Rules in mid-2007 and utility programs began that fall.
- Arkansas thus (1) relied on party collaboration to resolve issues, but also (2) brought in expert assistance so as not to "re-invent the wheel."

“Quick Start” Phase – 2007-2010

- The Rules required a 3-year start-up period (2007-2008-2009) to implement residential, commercial and industrial programs that were already proven in other jurisdictions.
- The PSC postponed decisions on whether to conduct an EE Potential Study prior to implementation of Quick Start, allow utility recovery of lost contribution to fixed costs, and utility performance incentives.
- Mostly, the early programs involved lighting and insulation, with some industrial audits and motor upgrades, but not a lot of whole-house or comprehensive commercial and industrial (C&I) process projects.

Quick Start Phase, continued

- The Rules required utilities to perform four California cost-effectiveness tests for each EE program and directed that overall EE portfolios pass the Total Resource Cost (TRC) test.
- The Rules defined a "*cost-effective program*" as "*one that has a high probability of providing aggregate ratepayer benefits to the majority of utility customers*."
- The Rules authorized utilities to recover contempo-raneously with EE program implementation their out-of-pocket <u>direct program costs</u>. The Commission approved utility-proposed annual budgets for their programs during 2007-2010.
- These costs are recovered through an Energy <u>Efficiency Cost Recovery (EECR) Rider</u> that the Commission must approve each year.

“Comprehensive” Phase –2011 to date

- The PSC didn’t initially define “comprehensive” in its 2007 order adopting the Rules.
- Consequently, in 2009 and 2010 the Commission organized workshops to solicit information, conducted proceedings, received formal comments and briefs and held hearings to aid in its determination of how to implement “comprehensive” programs.
- The Commission defined a comprehensive EE effort as one “capturing the greatest amount of cost-effective potential that can effectively be delivered.” Docket No. 08-144-U, Order No. 17 at 33-34.
- As the Quick-Start phase came to an end, the C&EE Rules required “comprehensive” program implementation beginning in 2011.

Comprehensive Program Framework, continued

- In a series of orders issued in December 2010 the Commission decided several important things:
  - In addition to allowing recovery of direct program cost through the EECR Rider, the Commission decided that <u>utilities should have the opportunity to recover the authorized revenue requirement through rates and not have the disincentive of reduced revenue caused by reduced sales of electricity and natural gas from EE programs</u>.
  - Because a portion of fixed cost recovery is included in the volumetric rate (kWh or therms), reduced volumes sold due to EE programs can result in reductions in the opportunity to recover the authorized revenue requirement through rates.

Comprehensive Program Framework, continued

- Thus, the Commission determined that some form of decoupling of fixed cost recovery from consumption was required to remove utilities' "throughput" incentive (which discourages energy conservation). The collection of Lost Contribution to Fixed Costs (LCFC) was the cure for this problem for both electric and gas utilities.
- The Commission approved LCFC recovery "only in the context of significant goal setting and the development of robust EM&V" and as "*a component of a coordinated group of policies reasonably calculated to deliver overall benefits to ratepayers, to utilities, and to society in a cost-effective manner*." (Docket No. 08-137-U, Order No. 14 at 18).
- As is the case with direct program costs, LCFC is recovered simultaneously with EE program implementation via the EECR Rider. LCFC is trued up each year, based on after-the fact net energy savings as determined by independent EM&V evaluators, so that there is no over- or under-collection of fixed costs related to EE program sales reductions.

Comprehensive Framework, continued

- In conjunction with allowing LCFC, the PSC decided that utilities should meet specific performance energy savings goals or targets that significantly change the outlook for utility resource planning.
- The targets, as a percentage of 2010 baseline energy sales, started low and have ramped up:
  - Electric targets were set at 0.25% for 2011, 0.50% for 2012, 0.75% for 2013 and 2014 and 0.9% for 2015 and 2016.
  - Gas company targets were set at 0.2% for 2011, 0.3% for 2012, 0.4% for 2013 and 2014, and 0.5% for 2015 and 2016.
- Targets for the 2017-2019 cycle remain to be determined by the Commission.

Comprehensive Framework, continued

- Finally, the Commission established <u>utility incentives for performance</u> that meets 80% or more of the energy-savings target and other specific criteria (including rigorous EM&V of energy savings and demonstration of cost-effectiveness), thus providing an incentive for the utilities to pursue energy efficiency as a resource. This shared-savings incentive mechanism has been refined for the 2017-2019 program cycle to further align incentives with performance.
- Unlike direct program costs and LCFC, which are projected and trued-up annually, utility incentives are not recoverable until the year following verification of energy-savings results.

Comprehensive Framework, continued

- The Commission workshops explored what components it should require in comprehensive programs. From that, the Commission adopted a comprehensiveness checklist that serves as a general guide for evaluating whether each utility's portfolio met the definition of comprehensive.
- These include factors such as avoiding cream-skimming and lost opportunities, leveraging other opportunities (such as federal programs, or third-party financing arrangements), and requiring that energy savings be carefully measured through a rigorous EM&V process overseen by an Independent Evaluation Monitor (IEM).

Comprehensive Framework, continued

- The PSC approved the collaborative development of a Technical Reference Manual (TRM), which contains "deemed savings" values for EE measures and protocols for calculating energy savings. The TRM is now in version 5.0.
- Working collaboratively through leadership of the Commission's General Staff, a state-of-the art Standardized Annual Reporting Packet (SARP) was developed to provide annual reports covering program and portfolio descriptions and budgets, utility-planned and -reported energy and demand savings, evaluated savings, program costs and cost-effectiveness results, customer participation levels, internal and external training data, and best practices results. The SARP enables meaningful analysis and comparison of results from utility to utility.

Comprehensive Program Framework, continued

- The EM&V process is overseen by the Independent Evaluation Monitor (IEM) hired by the Commission and funded by the utilities, with input from the Commission's General Staff, the utilities, and other stakeholders, now known as the Parties Working Collaboratively (PWC). The IEM is the "evaluator of evaluators," annually assessing the impact and process evaluations performed by each utility's independent EM&V contractor and making recommendations for continuous improvement of EE programs and portfolios.

Demand Response

- So far, the PSC has set no specific targets on demand response under the ECEA or its Rules, but demand reduction occurs and is tracked for EE programs that produce savings on peak.
- Arkansas's largest electric utilities include DR programs such as HVAC and irrigation controls within their EE portfolios.
- The recently completed Navigant Potential Study estimates up to 596 MW of "realistic achievable peak load reduction" within the four electric utility service territories by 2025.

Arkansas' s three-legged stool is assembled

- Having allowed utilities to recover direct program costs of comprehensive EE programs and LCFC contempo-raneously with program implementation, and the opportunity to earn a performance incentive for exceeding 80% of targeted energy savings, the Commission by 2011 had set in place all the requirements to make energy efficiency beneficial to both ratepayers and the utility, as required by the ECEA.
- At this point the utilities became fully engaged in implementing successful programs.
- Beginning in 2013 (for PY 2012 performance) and through 2015 (for PYs 2013 and 2014), all gas utilities and the two largest electrics had earned incentives. A third electric utility earned incentives for PY 2014.

More on Comprehensive Programs

- The PSC allowed utilities each to run their own programs instead of engaging a single third-party administrator to implement all programs.
- The utilities have, for the most part, contracted out implementation of EE programs to third-party for-profit and non-profit entities.
- Each utility has its own EE tariff docket, in which it files its 3-year EE plan and budgets, as well as its request for cost recovery, LCFC, and incentives through its EECR Rider that the Commission must approve each year. These and the utilities' annual reports and Excel Workbooks are transparent and easily accessible on the PSC website.

Weatherization Programs

- At the direction of the Commission, the PWC in 2014 recommended the adoption for all utilities of a Core Weatherization program drawn from successful elements of existing weatherization programs in the state, including a dual-fuel program offered by two utilities in one part of the state.
- In early 2015 the Commission approved the recommended modifications, and the new Core program will be compatible with and complementary to the federal low-income Weatherization Assistance Program (WAP) .
- The Core Program will commence in 2016, with the utilities sponsoring and funding, with ratepayer dollars, “Core” measures providing no-cost weatherization services for energy-inefficient homes.

Industrial Customers

- Arkansas has a large industrial base which uses over 1/3 of the state's total electricity.
- These are large sophisticated energy buyers that may be able to save large amounts of energy more cost effectively than other utility customers. Often they prefer to manage their own affairs, insisting on short investment payback periods.
- Through a stakeholder collaborative guided by a Commission rulemaking, the PSC adopted rules allowing large industries to be exempt from EE program charges if they are above certain energy usage thresholds.
- The Commission's Rules require the large customers to achieve measured results that are equal to or greater than those required by the Commission's utility targets.
- The Arkansas General Assembly has passed laws streamlining this opt-out process for certain large manufacturing customers.

Arkansas EE Potential Study

- In 2013, at the request of the PWC, the Commission authorized the solicitation of proposals to retain a consultant to conduct an EE potential study. That study was prepared by Navigant Consulting and filed this past June.
- The parties have made recommendations on how the Commission should use the results of that study to set the EE goals for the next three-year cycle of programs (2017-2019).
- The Commission is considering those and other PWC recommendations and will issue its decision regarding the level of the EE program goals in the near future.

Accomplishments of Collaboration

- Since 2007, the PSC's encouragement of collaborative approaches to resolving EE issues has resulted in the following achievements to further EE in Arkansas:
  - C&EE Rules, with amendments (2006-2014)
  - Deemed Savings Manual and TRM (now in 5th version) (2007-2009)
  - Standardized Annual Reporting Packet (SARP) and Excel Workbook (2010)
  - Energy-savings Targets (2010)
  - Method for calculating and recovering Lost Contribution to Fixed Costs (LCFC) (2010-2011)
  - Utility Performance Incentive shared-savings mechanism, with caps and refinements to better align incentives with performance (2010-2013)
  - Rules for EM&V and the engagement of the IEM (2011)
  - Rules for Self-Direct programs for large industrial customers (2011)
  - Protocols for Behavioral Programs, Leakage, and Net-to-Gross determinations (2013)
  - Guidelines giving formal definition to the practices and procedures used by the Parties Working Collaboratively (2014)
  - Energy Efficiency Potential Study (2013-2015)
  - Consistent Core Weatherization Program (2013-2015)
  - Common C&I Approach for EE Programs (2013-2015)

Resources

Arkansas Public Service Commission
1000 Center Street
Little Rock, AR 72201
501-682-2051

Secretary of the Commission (501) 682-5782

APSC Website: www.arkansas.gov/psc Click on Energy Efficiency to see TRM and Annual Reporting guidelines. Use Search to find Rules, Dockets, and companies.

Rules for Conservation and Energy Efficiency Programs (C&EE Rules): http://www.apscservices.info/Rules/energy_conservation_rules_06-004-R.pdf

Arkansas Utilities' EE Dockets

The following dockets may be searched for filings of utility EE plans, budgets, tariffs, testimony, comments, legal briefs, annual reports and Excel Workbooks on program results, as well as orders of the Commission. To access documents at: http://www.apscservices.info/efilings/docket_search.asp

enter the docket number:

- 07-075-TF Oklahoma Gas and Electric
- 07-076-TF Empire District Electric Co.
- 07-077-TF Arkansas Oklahoma Gas Corp.
- 07-078-TF SourceGas Arkansas
- 07-081-TF CenterPoint Energy Arkansas Gas
- 07-082-TF Southwestern Electric Power Co.
- 07-085-TF Entergy Arkansas, Inc.

See also:

EE Rulemaking, Docket No. 06-004-R(See esp. Order Nos. 12, 15, and 18)

Innovative Ratemaking, Docket No. 08-137-U (Order Nos. 14 and 15 deal with LCFC and Performance Incentives and the setting of energy-savings targets.)

Sustainable Energy Resources, Docket No. 08-144-U (Order No. 17 defines "Comprehensive.")

EM&V Rulemaking, Docket No. 10-100-R

Enhanced EE Programs, Docket No. 13-002-U

Utility Annual Reports are filed on or about April 1 each year in TF Dockets.